

## Mitchell County

### Estimated Economic Contribution of Agriculture, Food, and Food Processing Sectors 6/27/2019

Using the most recent IMPLAN data available (2017) adjusted for 2019, 19 agriculture, food, and food processing sectors were analyzed to determine their overall contribution to the Mitchell County economy.<sup>1</sup>

These 19 sectors have a total direct output of approximately **\$269.6 million** and support **968 jobs** in Mitchell County. Running the model for all 19 sectors simultaneously produces the following results:

Agriculture, Food, and Food Processing Sector Contribution to Overall Mitchell County Economy					
Contribution Type <sup>2</sup>	Employment	% Employment	Total Value Added <sup>3</sup>	Total Value Added % of Gross Regional Product <sup>4</sup>	Output <sup>5</sup>
Direct Effect	967.8	20.38%	\$77,974,985	23.27%	\$269,581,305
Indirect Effect	269.9	5.68%	\$25,234,399	7.53%	\$45,150,452
Induced Effect	256.9	5.41%	\$18,414,616	5.50%	\$33,014,204
<b>Total Effect</b>	<b>1494.6</b>	<b>31.47%</b>	<b>\$121,624,000</b>	<b>36.30%</b>	<b>\$347,745,961</b>

As shown in the above table, agriculture, food, and food processing sectors support **1,495 jobs**, or **31.47%** of the entire workforce in the county.

Another metric used to calculate the importance of sectors in an economy is their value added as a percentage of GRP. Total value added by the 19 agriculture, food, and food processing sectors is approximately **\$121.6 million**, or **36.30% of the GRP**.

The following tables document the top industries affected by employment and output, as well as a listing of all industries that were analyzed.

<sup>1</sup> Article on building a contribution analysis in IMPLAN that avoids double counting:

<https://implanhelptest.zendesk.com/hc/en-us/articles/115002801513-Considerations-of-Contribution-Analysis>

<sup>2</sup> Direct, indirect, and induced effects sum together to estimate the total economic contribution in the state. **Direct effects** capture the contribution from agricultural and food products. **Indirect effects** capture the economic benefit from farms and agricultural businesses purchasing inputs from supporting industries within the state. **Induced effects** capture the benefits created when employees of farms, agricultural businesses, and the supporting industries spend their wages on goods and services within the state.

<sup>3</sup> Value added = labor income + indirect business taxes + other property type income.

<sup>4</sup> GRP = final demand of households + governments expenditures + capital + exports - imports - institutional sales.

<sup>5</sup> Output = intermediate inputs + value added.

In the top ten agriculture, food, and food processing sectors by employment, the beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming sector is the top employer with **300 employees**. This table also shows the amount of jobs that are created by the agriculture industry in Mitchell County.

Top Ten Agriculture, Food, and Food Processing Sectors by Employment		
Sector	Total Employment	Total Output
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	300.3	\$48,901,445
Farm machinery and equipment manufacturing	217.5	\$88,382,263
Commercial hunting and trapping	123.3	\$173,408
Support activities for agriculture and forestry	108.7	\$22,535,190
Wholesale trade	105.9	\$20,565,180
Grain farming	97.1	\$46,497,810
Truck transportation	29.4	\$4,574,314
Monetary authorities and depository credit intermediation	27.4	\$5,589,269
Full-service restaurants	25.5	\$957,674
Other animal food manufacturing	23.4	\$28,837,601

The farm machinery and equipment manufacturing sector directly contributes approximately **\$88.4 million** to the Mitchell County economy. The table below also shows the amount of revenue that is generated in other industries by having a strong agriculture industry.

Top Ten Agriculture, Food, and Food Processing Sectors by Output		
Sector	Total Employment	Total Output
Farm machinery and equipment manufacturing	217.5	\$88,382,263
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	300.3	\$48,901,445
Grain farming	97.1	\$46,497,810
Other animal food manufacturing	23.4	\$28,837,601
Support activities for agriculture and forestry	108.7	\$22,535,190
Wholesale trade	105.9	\$20,565,180
Oilseed farming	15.4	\$20,333,082
Owner-occupied dwellings	0.0	\$6,424,981
Monetary authorities and depository credit intermediation	27.4	\$5,589,269
Real estate	6.9	\$4,677,567

Below is a summary of all agriculture data with employment levels and output level. These values can tell how many jobs are represented by each agriculture, food, and food processing sector and the output they contributed to the Mitchell County economy.

<b>All Agriculture, Food, and Food Processing Sectors</b>		
<b>Sector</b>	<b>Total Employment</b>	<b>Total Output</b>
Oilseed farming	15.4	\$20,333,082.20
Grain farming	97.1	\$46,497,810.36
Fruit farming	0.8	\$48,087.16
Tree nut farming	0.0	\$3.58
Greenhouse, nursery, and floriculture production	10.3	\$1,012,683.39
All other crop farming	21.6	\$2,156,167.51
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	300.3	\$48,901,443.48
Poultry and egg production	3.8	\$2,535,206.56
Animal production, except cattle and poultry and eggs	12.1	\$1,699,066.88
Commercial logging	0.6	\$33,463.16
Commercial hunting and trapping	123.3	\$173,408.15
Support activities for agriculture and forestry	108.7	\$22,535,190.58
Other animal food manufacturing	23.4	\$28,837,600.71
Meat processed from carcasses	8.9	\$4,318,469.52
Bread and bakery product, except frozen, manufacturing	5.7	\$653,766.81
Frozen cakes and other pastries manufacturing	0.3	\$53,091.38
Farm machinery and equipment manufacturing	217.5	\$88,382,263.18
Veterinary services	12.8	\$1,125,058.89
Landscape and horticultural services	5.2	\$285,440.56

All 105 counties in Kansas have an IMPLAN model and an agriculture, food, and food processing contribution summary. These values do not factor in the retail environment of food sales. Food retail is important, but in order to provide the most accurate picture of what production agricultural and processing contributes to Mitchell County, the retail sector was omitted.